# Change Log for Schemas and PHS 398 Crosswalk

#### **OCTOBER 30, 2003:**

#### Schema changes

#### General:

Hard-coded paths have been removed from all *schemaLocation* attributes, within the <xs:import> tags. This is to support current efforts to establish multiple environments, one each for development, test, and production. In the absence of a specific path, schema references will resolve to the same platform and directory as the schema that is making the reference. Since this is always the way we post the CGAP schemas anyway (all related schemas post to the same directory), the elimination of specific platform/directory paths in the *schemaLocation* attributes will make configuration management and deployment much easier and less error-prone.

#### RARSCHEMA.XSD:

- 1. AnimalSubject.IACUCApprovalDate is now an optional *choice* element. The respondent may now provide the IACUCApprovalPending tag in lieu of the IACUCApprovalDate.
- OrganizationCategoryDescription had no content definition. It is not used in the PHS 398
  crosswalk, but for sake of accuracy and consistency this has been specified as an xs:string
  type. This should have no effect on service providers, since there is no reason they should
  be generating this tag all in the 398 datastream anyway.

#### NIHSCHEMA.XSD:

- 1. Changed definition of all tags which had no specific content definition, and were intended to be *flags* by their very *presence*. These have been changed so that they cannot be provided in the datastream with values. These flag tags formerly had no content model defined, which led to occasional confusion during the initial pilot. Sometimes the datastream would carry values for these tags, and the values were being used to indicate a *negative* answer to the flag, whereas the interpretation of the tag's presence is always interpreted to be a positive assertion of that condition. The flags are now defined as xs:token type, with length facet of "0" meaning that they *must* be provided as empty tags. Specifically, this change affects the following tags:
  - BudgetSummary.IndirectCostRateDetails.NoIndirectCostsRequested
  - BudgetSummary.IndirectCostRateDetails.BaseRateDescriptors:
    - SalariesAndWagesBase
    - OtherBase
    - ModifiedTotalDirectCostsBase
    - OffsiteOtherSpecialOrMultipleRate
  - InventionsAndPatentsType:
    - InventionsPreviouslyReported
    - > InventionsNotPreviouslyReported
    - NoInventions
- 2. Removed the nih:NIHBiographicalSketch element.
- 3. Defined new complex types for biosketches:
  - KeyPersonBiosketchType. A complex type that indicates the \*additional\* elements of biosketch page information that are required for a KeyPerson (i.e., references to the two PDF attachments)

- NonKeyPersonBiosketchType. Used to capture biosketch page information for an individual who has not been listed as key personnel. In this case, the KeyPerson component cannot be used to represent the other (structured) biosketch page information. The NonKeyPersonBiosketchType extends the KeyPersonBiosketchType, adding the structured components that a non-key person would otherwise lack ... specifically, the name, account identifier, and position title.
- NonKeyPersonBiographicalSketch added as an optional repeating element, within the ResearchApplicationExtension.
- 4. NIHBiographicalSketch retained as a component of KeyPerson, but is no longer defined by reference to the nih:NIHBiographicalSketch *element*. It is now defined as an nih:KeyPersonBiosketchType, as discussed above.
- 5. The following components of KeyPersonType were defined as mandatory, and are now defined as optional:
  - AccountIdentifier
  - OrganizationDUNS
- 6. Added new repeating component named Degree, as a child under the ProgramDirectorPrincipalInvestigator node. The new component is optional, with up to three occurrences. The definition is xs:string, and there is no enumeration facet.
- ProgramDirectorPrincipalInvestigator.AccountIdentifier is now defined with a minLen facet of 1 and maxLen facet of 20. The minLen facet will ensure that we are getting an account identifier for the PI, since the AccountIdentifier received in the KeyPerson section is now optional.
- 8. Definition of GrantNumberType has been revised, so that applicants are not required to supply *all* components of the prior number. These are not always easy to supply at time of submission, and are really not necessary to sufficiently identify the application that is being renewed, supplemented, or revised. The following components, which were formerly mandatory, are now optional:
  - ApplicationTypeCode
  - ActivityCode
  - SupportYear

Plus, the AdministeringOrganizationID, which remains mandatory, also has a minLen facet of 2. This ensures that the GrantNumber, when required, is populated with some information (not just empty tags).

9. InvestigatorCoverLetter is now optional.

# TICKET.XSD

- 1. Added parentMessageID element after correctionID element
- 2. in the 'response' element changed accessionNumber to parentMessageID

# PERSONINFOREQUEST.XSD PERSONINFORESPONSE.XSD

New schemas for the person information webservice – info request and response.

# CGAPMESSAGE.XSD CGAPBODY.XSD

Added newly created messages (personinforequest, personinforesponse) to the choice of message types in the cgapbody.

# Crosswalk changes

In the PHS 398 Crosswalk, the most recent changes appear in RED typeface. All changes relate to recent changes in the schemas, in order to maintain consistency between schemas and crosswalk. For more details, please refer to the description of the associated schema element change.

#### OCTOBER 30, 2003:

# **Schema changes**

#### RARSCHEMA.XSD -

HumanSubject.IRBApprovalDate is now defined as optional. This will allow applicants to submit an assurance number *without* being required to submit an IRB approval date, which is no longer collected on the PHS 398 application.

#### **OCTOBER 29, 2003:**

#### Schema changes

#### NIHSCHEMA.XSD -

Modified the definition of the IndirectCostDetails.Rate component. Formerly this was defined as simply an integer. Since F&A rates are often expressed in fractional percentages, the definition of "integer" does not provide sufficient precision. This component is now defined as xs:decimal, with 5 total digits and 2 digits of fractional precision.

#### **OCTOBER 8, 2003:**

# Schema changes

COMMONTYPES.XSD RARSCHEMA.XSD PHS398SCHEMA.XSD –

These schemas all contained inconsistent references between

http://arch4.era.nih.gov:7778/schema and http://era.nih.gov/Projectmgmt/SBIR/CGAP, for import file locations and namespaces. The era.nih.gov/Projectmgmt location is the accepted location for all references, so all schemas have been revised in order to restore this path.

#### NIHSCHEMA.XSD -

Restored "era.nih.gov/Projectmgmt/SBIR/CGAP" references to import file locations and namespaces, as described above.

Also modified the SBIRQuestions/STTRQuestions choice element, making it optional instead of mandatory. This way, an applicant who is simply submitting a new application that is neither SBIR nor STTR does NOT need to submit an answer to either one of these questions. The only thing that is required for a new non-SBIR/STTR application is an empty <NewApplicationQualifiers> tag.

#### **SEPTEMBER 26, 2003:**

# Schema changes

# RARSCHEMA.XSD --

AssuranceNumber and IACUCApprovalDate are now optional elements for AnimalSubjects.

These are only applicable when the answer to VertebrateAnimalsUsedQuestion is 1 (yes).

#### **JUNE 6, 2003:**

# **Crosswalk changes**

In the PHS 398 Crosswalk, the most recent changes appear in RED typeface. All changes relate to recent changes in the schemas, in order to maintain consistency between schemas and crosswalk. For more details, please refer to the description of the associated schema element change.

# Schema changes

- 1. KeyPerson element cardinality changed, to be 1..unbounded
- Cardinality of HumanSubject.ExemptionNumber changed, to be 1..6 (formerly only one allowed)
- 3. Separated ResearchPlan.Narrative down into subcomponents. The Narrative node still exists but now contains the following sub-elements:
  - SpecificAims
  - BackgroundAndSignificance
  - PreliminaryStudies\*
  - ProgressReport\*
  - ResearchDesignAndMethods
  - \* PreliminaryStudies / ProgressReport are part of the same "choice" element. The choice is described in the crosswalk, but essentially the PreliminaryStudies applies when the application is "NEW" (i.e. NewApplicationQualifiers are given in the ResearchApplicationExtension and the answer to the SBIR and STTR phase2Indicators are both "N").

The ProgressReport applies when the application is "Competing Continuation" (i.e. CompetingContinuationQualifiers supplied) or it is a "Supplement" (i.e. SupplementGrantNumber supplied).

- 4. Separated HumanAndAnimalSubjects into HumanSubjects and VertebrateAnimals
- 5. Changed name of ResearchCoverPage.ProjectSite to ResearchCoverPage.PrimaryProjectSite. Then added ResearchCoverPage.AlternateProjectSites, cardinality 0..unbounded. This allows multiple project sites to be captured for the 398, as the paper form allows. This had to be modeled as separate elements, since ProjectSite was a Research & Related package component, and its cardinality has been set by the R/R committee to 0..1. The change of name for the R/R package element (adding the word "Primary") helps to distinguish the original component from the new one just added.
- 6. Changed datatypes for HumanSubject.AssuranceNumber and AnimalSubject.AssuranceNumber, from "integer" to "string".

- 7. Removed all pattern-matching and enumeration facets from commontypes.xsd.
- 8. Added datatype for FundingOpportunityResponseCode (boolean)
- 9. Added InvestigatorCoverLetter to the schema, it is connected to the ResearchApplicationExtension. The inclusion of this is not going to be enforced until release 2.